

REMARKS

The Office Action of August 20, 2009, has been carefully studied. Claims 1, 3 and 8-12 currently appear in this application. These claims define novel and unobvious subject matter under Sections 102 and 103 of 35 U.S.C., and therefore should be allowed. Applicant respectfully requests favorable reconsideration and formal allowance of the claims.

Claim Amendments

Claim 1 has been amended to limit "a non-saccharide ingredient" to one in a liquid or paste form, and to amend "a saccharide derivative of α,α -trehalose" to --a saccharide composition comprising 30 w/w % or more of α,α -trehalose and other saccharide derivatives of α,α -trehalose--, and which is an amorphous form.

"A non-saccharide ingredient in liquid or paste form" is supported by the specification as filed at page 4, lines 15-18. "A saccharide composition comprising 30 w/w % α,α -trehalose" is supported by the description at page 12, lines 2-6 of the specification. Further, "a saccharide composition in an amorphous form" is supported, for example, by Examples A-3 to A-5 and Example A-7, in which the saccharide composition is described as a base for bowdlerization in amorphous form.

Claims 7, 13 and 14 have been cancelled.

Rejections under 35 U.S.C. 112

Claim 7 is rejected under 35 U.S.C. 112, first and second paragraphs, as failing to comply with the written description requirement and being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As the present amendment canceled claim 7, these rejections are now moot.

Art Rejections

Claims 1, 3, 7, 8, 9 and 11-14 are rejected under 345 U.S.C. 103(a) as being unpatentable over Maruta et al., EP 0606753. The Examiner states that Maruta teaches a method of powdering orange juice and the powdered orange juice as a powdery composition (Example B-6, lines 19-20) comprising the steps of mixing a non-saccharide ingredient of orange juice with a powder rich in non-reducing saccharide.

This rejection is respectfully traversed.

It should be noted that the method disclosed in Example B-6 of Maruta is not a method for producing powdered non-saccharide ingredients. Maruta clearly states as follows:

Thirty-three parts by weight of a **powdered** orange juice prepared by spraying drying was mixed to homogeneity under stirring conditions with 50 parts by weight of a powder rich in non-reducing saccharide obtained by the method of Example A-2 (lines 1-3 of Example B-6) [emphasis added.]

It is clear from the above that the orange juice prepared by “spray drying” is already in powdery form **before** being mixed with a non-reducing saccharide. It is respectfully submitted that Maruta does not disclose a method for powderizing non-saccharide ingredients by mixing a non-reducing saccharide with non-saccharide ingredients. Clearly, the orange juice in Maruta was already in powder form. In contrast thereto, the claims now require that the non-saccharide ingredient be in liquid or paste form.

Additionally, “a powder rich in non-reducing saccharide obtained by the method of Example A-2” used in Example B-6 comprises 7.4% of PII (see Example A-2 of Maruta), that is, 7.4% of maltosyl-trehalose (see last two sentences of paragraph 0089 of Maruta, where it is noted that PII is hydrolyzed by glucoamylase into one mole of trehalose and two moles of glucose, that is, maltose).

In contrast thereto, the saccharide composition used in the herein claimed method comprises 30 w/w% of α -maltosyl-trehalose. Thus, it is clear that the saccharide composition used in the presently claimed method is clearly distinguished from "a powder rich in non-reducing saccharide" used in Example B-6 of Maruta.

There is nothing in Maruta that teaches a method for powdering non-saccharide ingredients in liquid or paste form by mixing the ingredient with a saccharide comprising 30 w/w% or more of α -maltosyl α,α -trehalose and other saccharide derivatives of α,α -trehalose.

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Maruta in view of Yoshiaki, JP 08-020581.

This rejection is respectfully traversed.

The fact that Yoshiaki teaches a stable functional material containing a functional substance such as DHA, α,α -trehalose, an emulsifier and water adds nothing to Maruta, because, as noted above, Maruta does not render claim 1, from which claim 10 depends, obvious. Without a disclosure or suggestion of bowdlerizing a non-saccharide ingredient that is in liquid or paste form using at least 39 2/2% of trehalose, the fact that an emulsion can be powderized is immaterial.


Moreover, Yoshiaki teaches only the use of α,α -trehalose, which is a disaccharide having a glucose polymerization degree of **two**. There is nothing in Yoshiaki that teaches or suggest the use of a saccharide derivative of α,α -trehalose "having a trehalose structure and an end unit and a glucose polymerization degree of **three or more**" as a powderizing base for a non-saccharide ingredient.

In view of the above, it is respectfully submitted that the claims are now in condition for allowance, and favorable action thereon is earnestly solicited.

Respectfully submitted,

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